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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

: **Confirmation No. 8287**

Akira FUKUNAGA et al.

: Docket No. 2004-0173

Serial No. 10/784,151

: Group Art Unit 2812

Filed February 24, 2004

: Examiner - Not yet assigned

PLATING APPARATUS AND METHOD  
OF MANAGING PLATING LIQUID  
COMPOSITION

THE COMMISSIONER IS AUTHORIZED  
TO CHARGE ANY DEFICIENCY IN THE  
FEES FOR THIS PAPER TO DEPOSIT  
ACCOUNT NO. 23-0975

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Pursuant to the provisions of 37 C.F.R. §§ 1.56, 1.97 and 1.98, Applicants request consideration of the references listed on the attached Form PTO-1449 and any additional information identified below in paragraph 3. A legible copy of each reference listed on the Form PTO-1449 is enclosed, except a copy is not provided for:

- ☐ each U.S. Patent and U.S. Patent application publication (*for U.S. National applications filed after June 30, 2003 and International applications that have entered U.S. National Stage after June 30, 2003*),
- ☐ each reference previously cited in the international application PCT/\_\_\_\_\_; and/or
- ☐ each reference previously cited in prior parent application Serial No. \_\_\_\_\_.

1a. ☒ This Information Disclosure Statement is submitted:

within three months of the filing date (or of entry into the National Stage) of the above-entitled application, **or**

before the mailing of a first Office Action on the merits or the mailing of a first Office Action after the filing of an RCE,

**and thus no certification and/or fee is required.**

1b. ☐ This Information Disclosure Statement is submitted

after the events of above paragraph 1a and prior to the mailing date of a final Office Action or a Notice of Allowance or an action which otherwise closes prosecution in the application, and thus:

(1) ☐ the certification of paragraph 2 below is provided, **or**

(2) ☐ the fee of \$180.00 specified in 37 CFR 1.17(p) is enclosed.

1c. ☐ This Information Disclosure Statement is submitted:

after the mailing date of a final Office Action or Notice of Allowance or action which otherwise closes prosecution in the application, and prior to payment of the issue fee, and thus:

**the certification of paragraph 2 below is provided, and**

**the fee of \$180.00 specified in 37 CFR 1.17(p) is enclosed.**

2. It is hereby certified

a. ☐ that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the Statement, or

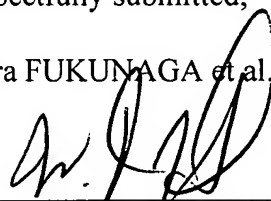
b. ☐ that no item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the person signing the certification after making reasonable inquiry, was known to any individual designated in §1.56(c) more than three months prior to the filing of the Statement.

3. ☐ Consideration of the following list of additional information (including any copending or abandoned U.S. application, prior uses and/or sales, etc.) is requested.
4. For each non-English language reference listed on the attached form PTO-1449, reference is made to:
- a. ☐ a full or partial English language translation submitted herewith,
  - b. ☒ a foreign patent office search report (in the English language) submitted herewith,
  - c. ☐ the concise explanation contained in the specification of the present application at page,
  - d. ☐ the concise explanation set forth in the attached English language abstract,
  - e. ☐ the concise explanation set forth below or on a separate sheet attached to the reference:
5. ☒ A foreign patent office search report citing one or more of the references is enclosed.

Respectfully submitted,

Akira FUKUNAGA et al.

By



W. Douglas Hahm  
Registration No. 44,142  
Attorney for Applicants

WDH/ksh  
Washington, D.C. 20006-1021  
Telephone: 202-721-8200  
Facsimile: 202-721-8250  
July 30, 2004

FORM PTO 1449 (modified)

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICELIST OF REFERENCES CITED BY APPLICANT(S)  
(Use several sheets if necessary)

Date Submitted to PTO: July 30, 2004

JUL 30 2004

O I P E J C T A  
PATENT & TRADEMARK OFFICEATTY DOCKET NO.  
2004-0173SERIAL NO.  
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February 24, 2004GROUP  
2812

## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA	6,113,769	09/2000	UZOH et al.			11/21/1997
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO	
	AJ	2,773,398	07/1999	FRANCE				X
	AK	0 159 430	10/1985	EUROPE				
	AL							
	AM							
	AN							

## OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

	AO	Patent Abstracts of Japan, Publication No. 61 170597, August 1, 1986, "Method and Device for Controlling Plating Bath".
	AP	Derwent Publications Ltd., London, GB, XP-002282550, August 1, 1986, "Controlling Composition of Copper Plating Bath - by Measuring Concentrations of Components by Ion Chromatography and Supplying Accordingly".
	AQ	Patent Abstracts of Japan, Publication No. 07 157890, June 20, 1995, "Acidic Copper Plating Bath and Plating Method Using the Same".

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	AH						
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	AJ							
	AK							
	AL							
	AM							
	AN							

## OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

	AO	Patent Abstracts of Japan, Publication No. 2000 080494, March 21, 2000, "Plating Solution for Copper Damascene Wiring".
	AP	Patent Abstracts of Japan, Publication No. 59 190657, October 29, 1984, "Specimen Pretreating Method and Apparatus Thereof".
	AQ	Derwent Publications Ltd., London, GB, XP-002282551, October 29, 1984, "Pretreatment of Liquid Sample for Chromatographic Analysis - Involves Passing Sample Through Hollow Fibre Ion Exchange Membrane Tube to Remove Selected Ions".

EXAMINER

DATE CONSIDERED